DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022742 Address: 333 Burma Road **Date Inspected:** 10-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** and Tower Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in the Bay 10:

FCAW welding of weld joint BK010A8-001-061, 070 located on PCMK OBG bike path. Welder was identified as 054069. QC was identified as ZPMC CWI Li Jun (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was Wang Chung Xin (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-T-2232-ESAB and WPS-B-T-2233-ESAB as verbally identified by QCA1. See photo below of QC1 monitoring some of the weld parameters.

Bay 11

This QA Inspector randomly observed the following work in progress in the Bay 11:

SMAW welding of weld joint 32TR1-001-009 located on PCMK OBG traveler rail. Welder was identified as 046769. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with WPS-B-P-2212-TC-U5b as verbally identified by QC1.

SMAW welding of weld joints ESD1-FGSA6-2-29, 30 located on PCMK tower, lift 6. Welder was identified as 046769. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with

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WPS-B-P-2313-TC-P4 as verbally identified by QC1.

OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joints SEG3007AT-084, 086, 089 located on PCMK OBG Segment 13AE. Welder was identified as 050242. QC was identified as ABF CWI Sheng Qing Quan (QC2). Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Zhan Hai Feng (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA2.

SMAW welding of weld joint SEG3007M-253 located on PCMK OBG Segment 13AE. Welder was identified as 200113. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2211-TC-U4b as verbally identified by QCA2.

SMAW welding of weld joints SEG3007AP-030, 034 located on PCMK OBG Segment 13AE. Welder was identified as 215553. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2213-TC-U4b as verbally identified by QCA2.

SMAW welding of weld joints SEG3007K-014, 020 located on PCMK OBG Segment 13AE. Welder was identified as 216086. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-4113-TC-U4b-2 as verbally identified by QCA2.

SMAW welding of weld joint SEG3013AW-006 located on PCMK OBG Segment 13AW. Welder was identified as 066443. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2213-TC-U4b-FCM-1 as verbally identified by QCA2.

SMAW repair welding of various weld joints located on PCMK OBG Segment 13AE. Welder was identified as 205098. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1 as verbally identified by QCA2. QC2 informed this QA Inspector that ZPMC welder was working with ABF Inspectors who were conducting visual testing (VT) and magnetic particle testing (MT) and performing grinding and welding, where necessary when indications were observed as a result of the VT and MT.

SMAW welding of temporary alignment plates at the 12CW/13AW transverse joint, bottom plates and side plates, north (crossbeam) side located on PCMK OBG Segments 12CW/13AW. Welder was identified as 205098. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2114 as verbally identified by QCA2. See photo below of some of the alignment plates at the bottom

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plate/side plate north (crossbeam) side corner.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer